Hirst (B. C.)

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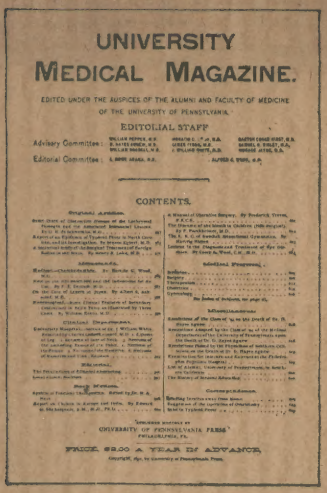

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EDITORIAL STAFF

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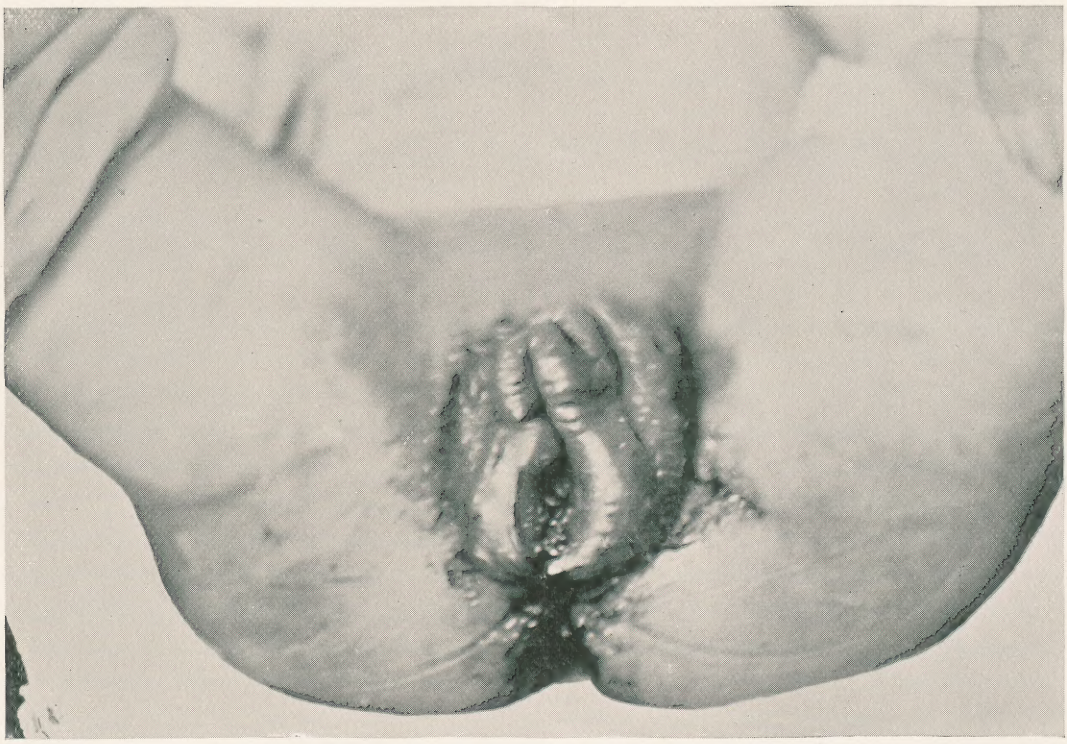
Two Cesarean Sections and Three Symphyseotomies: A Year's Work in the Surgical Treatment of Insuperably Obstructed Labor.

BY BARTON COOKE HIRST, M.D.,

Professor of Obstetrics in the University of Pennsylvania.

FIG. 1.



Edema of the vulva.

TWO CESAREAN SECTIONS AND THREE SYMPHYSEOTOMIES: A YEAR'S WORK IN THE SURGICAL TREATMENT OF INSUPERABLY OBSTRUCTED LABOR.[1]

By Barton Cooke Hirst, M.D.,

Professor of Obstetrics in the University of Pennsylvania.

An insuperably obstructed labor is, I think, as dangerous a condition as can be found in medicine or surgery. It is surely fatal for mother and child unless delivery is effected by a difficult operation, and yet the serious nature of the case is often unsuspected. A grave disease or a bad injury is not commonly overlooked, but an insurmountable obstruction in labor is very likely indeed to remain undetected until the mother and child are past aid. The general practitioner trusts too long to nature, as a rule, and when he discovers that natural forces are insufficient, he tries forceps and version, procedures that have stood him in good stead before. It is often only when these fail that he realizes the threatening character of the case and calls upon the expert, whose efforts are handicapped by the original attendant's delay. Fortunately, the five cases about to be reported do not strikingly illustrate this fact, but they do show some of the commonest obstructions to be anticipated in labor, and they may, perhaps, serve as a warning to the obstetrician to be on his guard against too long a delay in similar cases. They certainly furnish a strong argument in favor of careful pelvic exploration, including pelvimetry, in pregnant and parturient women.

Case I.—*Primipara in labor many hours, with pelvis choked by a fibroid attached to the cervix; Porro operation; recovery.*—This case has been reported[2] by my friend, Dr. Guy Hinsdale, under whose care the patient was. The child was, unfortunately, dead at the time of operation. The woman had a shock temperature and pulse=97° and 140, when the operation was begun. She reacted immediately afterward and made a good recovery. One of the chief elements of success, I think, was the rapidity of the operation, less than half an hour, which was obtained partly by certain steps in the technique which I strongly favor. The abdominal incision was long enough to turn the uterus out of the abdominal cavity before it was incised. The intestines were at once covered with sterilized towels placed in the abdominal cavity.

[1] Read before the College of Physicians, December 16, 1893.

[2] Medical News, 1893.

The cervix was transfixed with pins and secured by a round rubber band, which was tied in a single knot and the ends then clipped by a very short hemostat that I have for the purpose. I consider this much superior to the wire noeud. The extra-peritoneal treatment of the stump is not an ideal method, but it is quick and easy, and is, therefore, to be preferred when every moment saved is of importance to the woman.

CASE II.—*Face presentation with chin posterior and gigantic overgrowth of the fetus (14 lbs.); Porro operation; recovery.*—This woman had had several children before without special difficulty. She had been in labor a comparatively short time before she was brought to the Maternity Hospital by Drs. McFadden and Hammond. Efforts had been made to deliver with forceps, but they had failed. When I first saw the woman she was somewhat shocked; the uterus was tetanically contracted; the contraction ring was not far from the navel. The vulva presented the most remarkable appearance I have ever seen. The labia were so edematous that they projected three or four inches from the body; they were dark, red in color, and in spots contused and abraded. The vagina also showed abrasions. The child's face was tightly wedged in the pelvis, with the chin posterior. I was unable by any plan to budge the face in any direction. As soon as the woman could be prepared, a Porro-Cesarean section was performed. It required all the force I was capable of to dislodge the face from above. The child was dead and its body, as well as the uterus, fairly stank. My hands were infected in the operation, and I was disabled for two weeks. The nurse in attendance on the case afterwards had a similar mishap. Some one inexperienced in this complication of labor—face presentation, chin posterior, gigantic overgrowth of the fetus—might inquire why craniotomy was not attempted. This operation received careful consideration, but was discarded for the following reasons: It was not certain that the child was dead; an attempt to extract the child through such a vagina and vulva as this woman had would have been followed by serious injury, sloughs and infection; as it was, the left labium sloughed off after the operation; finally, I am convinced that an attempt to deliver by craniotomy would have failed, and that I would have been compelled eventually to perform Cesarean section with much diminished prospects of success. A medical friend had this experience last summer in a similar case, and I have the specimens from another fatal case in my collection in the University.

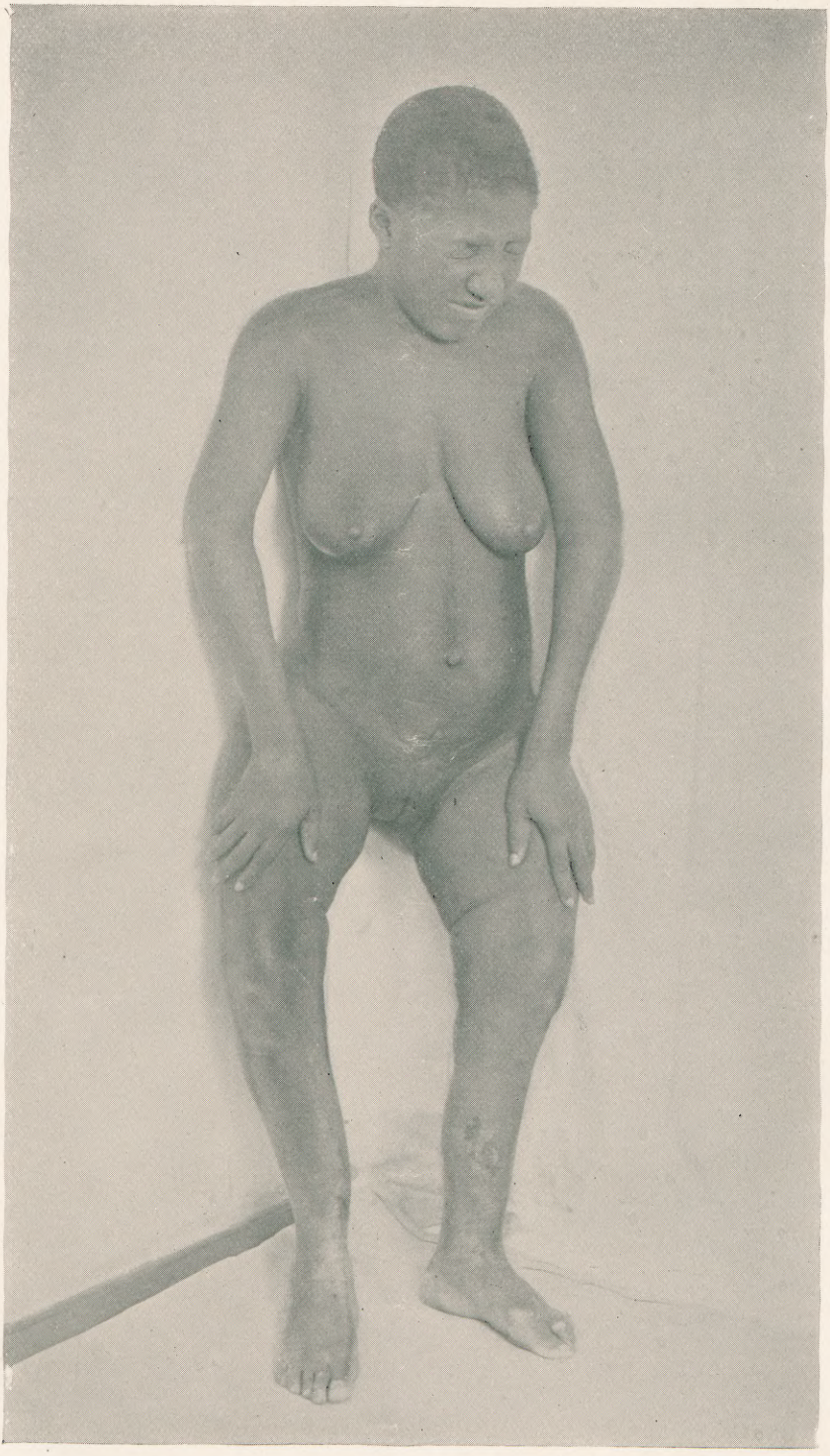
CASE III.—*Primipara in labor forty-eight hours; rachitic pelvis; symphyseotomy and delivery with forceps; recovery.*—This case has been previously reported.[1] I thought it at the time the first in America,

[1] Medical News.

FIG. 2.

Appearance of child after prolonged labor in a face presentation.

FIG. 3.



Rachitic dwarf, 4 feet, 1 inch high, c. v. less than 6 centimetres, delivered by symphyseotomy.

but I soon discovered that I was anticipated two days by Dr. Jewett, of Brooklyn. I am now told by Dr. Harris that I was preceded six months by an operator in the Southern States, who is shortly to report his case, the first in America. My patient and her baby were sent back to Germany in good condition.

CASE IV.—*Rachitic dwarf, primipara, aged 34, diagonal conjugate of 9 cm., delivered by prematurely induced labor, artificial dilatation of the cervical canal, symphyseotomy and version.*—This case has also been previously reported.[1] The delivery was effected with remarkable ease and rapidity. The mother had an afebrile convalescence, and the child, seen last at six months of age, was in a fine condition. A very valuable aid in this case was the slight diminution of the head diameters, the child being between two and three weeks premature, and the thorough dilatation of the cervical canal by a Barnes' bag twice as large as the largest sold in the shops, which I had made to order.

CASE V.—*A rachitic dwarf, a primipara, 4 feet 1 inch high; diagonal conjugate, 9 cm.; symphyseotomy and version; recovery.* This case, not hitherto reported, is, on the whole, the most instructive I ever attended. My attention was called to the woman when I first assumed charge of the Maternity Hospital this autumn. It was obvious at a glance that her pelvis was deformed. Her diminutive size and the peculiar waddle by which she progressed indicated a serious pelvic deformity. I at once measured the pelvis, and found a diagonal conjugate of 9 cm. I was surprised to find it so long. I repeated the measurement several times, always with the same result. Two of my medical friends found, independently, the same measurement. It seemed a case, therefore, for symphyseotomy. I had delivered a rachitic dwarf with the same measurement both antero-posteriorly and transversely a few months before without difficulty, and there are many cases on record delivered successfully by symphyseotomy with as small or smaller measurements. I had my misgivings, however, and would have preferred Cesarean section, but I felt constrained to resort to symphyseotomy on account of its much lower mortality, and in view of its probable success. Labor was induced, the cervical canal artificially dilated, the symphysis cut and forceps tried. This failed to engage the head. Version was performed and the child extracted up to the shoulders. So much force was required to extract these and the head that I broke a clavicle and the child's neck. I felt convinced by this experience that the true conjugate was smaller than one would ordinarily be justified in assuming with a diagonal conjugate of 9 cm. To determine this point, and to provide for my use a more accurate

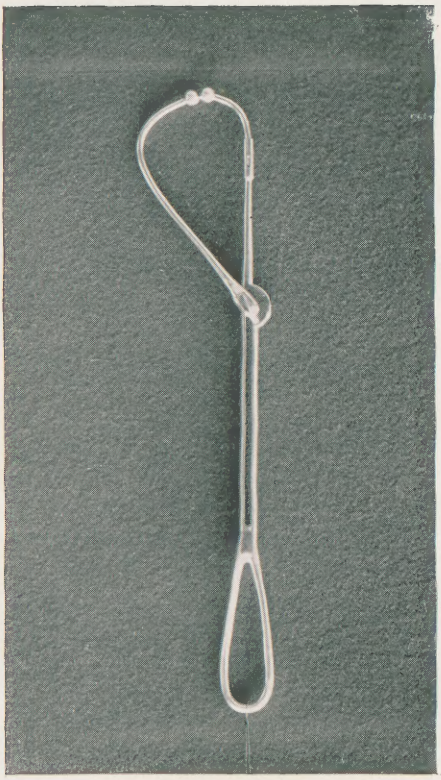
[1] Medical News.

system of pelvimetry than Baudelocque's plan, I had this pelvimeter constructed. I found by it that the woman had a true conjugate of less than 6 cm.

To measure the conjugate with this instrument the woman is placed in the lithotomy position, with the buttocks projecting well over the edge of the table. A mark with a lead pencil is made on the skin over the symphysis one-eighth of a inch below the upper edge. Two fingers of the left hand are inserted in the vagina to find the promontory of the sacrum, as in Baudelocque's method. Tip B of the pelvimeter is then placed firmly upon the middle line of the promontory, and an assistant adjusts tip A directly over the mark made upon the skin covering the symphysis. This arm is then screwed fast, the pelvimeter withdrawn and the distance between the tips measured with a tape measure (see Fig. 6). This is the true conjugate plus the thickness of the upper portion of the symphysis. The latter is measured as shown in Fig. 7. The usual thickness of the symphysis at its upper part I have found, from the measurement of fifty-five pelves, to be 1 cm. Twenty-six pelves had this measurement; thirteen had 1½; nine, 1¼; four, 1¾; and only three measured 2 cm. One of these was a high grade rachitic pelvis, one was of the masculine type, and the third was a justo-major pelvis. I think my case demonstrates forcibly the superior accuracy of this method of finding the true conjugate. The idea, it will be recognized, is borrowed from Wellenbergh and his recent follower, Skutsch, but this pelvimeter answers the purpose much better, I think, than any hitherto constructed.

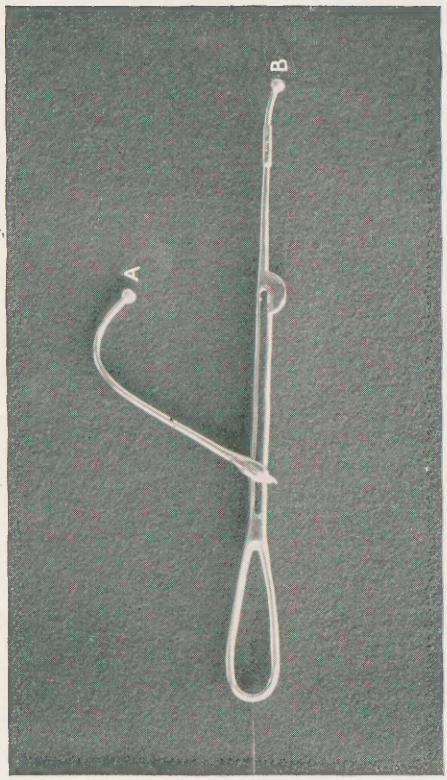
It is needless to argue for greater accuracy in pelvimetry if we are to base operative procedures on the difference of less than ½ cm. in the conjugate. The necessity for it is apparent. That the method at present in widest use, Baudelocque's plan, of taking the diagonal conjugate is untrustworthy is well known to all experienced in pelvimetry. Mine is by no means the only case in which there has been a difference of 3 cm. or more between the true and diagonal diameters, instead of the 1¾ cm. usually allowed. Litzmann measured a pelvis in which the difference between the true and diagonal conjugates was 2.8 cm. Pershing found one in Philadelphia in which the difference was 3.6 cm., by actual measurement of the dried specimen It is easy enough to lay down rules for avoiding this error, based on the study of dried specimens, but it is practically impossible to put them to use in the living female. The height of the symphysis is readily found, but an allowance for variations in this respect avoids few errors. It is the variations in the conjugato-symphyseal angle that count, and there is no way of accurately determining them.

FIG. 4.



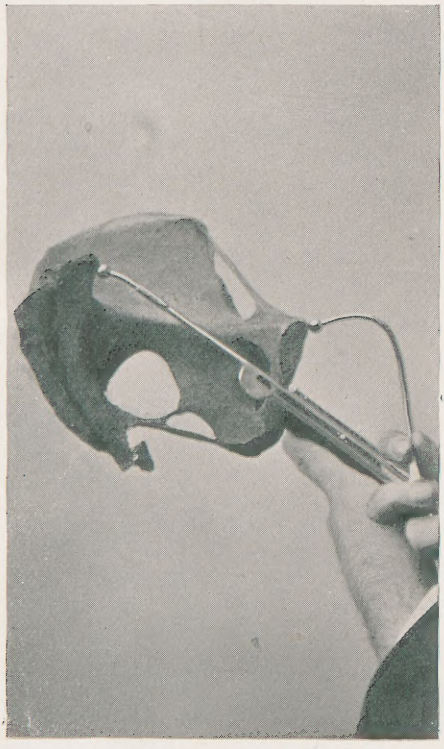
Pelvimeter for measuring the thickness of the symphysis.

FIG. 5.



Pelvimeter for measuring distance between the outer edge of the symphysis and the promontory of the sacrum.

FIG. 6.



Measuring the conjugate diameter plus the thickness of the symphysis.

FIG. 7

Measuring the thickness of the symphysis.